IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

BLACKBIRD TECH LLC d/b/a	)	
BLACKBIRD TECHNOLOGIES,	)))	
Plaintiff,	))	
v.	))	C.A. No. 17-283-MSG
CLOUDFLARE, INC.,	))	**DEMAND FOR JURY TRIAL**
Defendant.	))	

CLOUDFLARE'S OPENING BRIEF SUPPORTING
MOTION FOR JUDGMENT ON THE PLEADINGS UNDER 35 U.S.C. § 101

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Blackbird's patent describes abstract ideas, not patentable inventions. As a result, the Court should invalidate the claims under 35 U.S.C. § 101 and dismiss the lawsuit.

I. NATURE AND STAGE OF PROCEEDINGS

This is a patent-infringement case filed in March 2017. The case is in its early stages: the parties have not sought discovery and the Court has not entered a scheduling order. Cloudflare moved to transfer the case on June 20, 2017. ECF No. 21.

In a parallel lawsuit concerning the same patent, Fastly moved for judgment on the pleadings based on § 101. No. 17-284, Doc. 26. Cloudflare joins that motion and submits this brief to highlight additional points that further illustrate the invalidity of the patent-in-suit.

II. SUMMARY OF THE ARGUMENT

The claims of the '335 patent do not satisfy § 101. Applying *Alice*, the Court should find that the claims (i) address abstract ideas and (ii) do not include elements that "transform the nature of the claim" into a patent-eligible application. *Alice Corp. v. CLS Bank Int'l*, 134 S.Ct. 2347, 2355 (2014). The Court should invalidate the claims and dismiss the lawsuit.

III. STATEMENT OF FACTS

Blackbird accuses Cloudflare of infringing U.S. Patent No. 6,453,335, entitled "Providing an Internet Third Party Data Channel." The Amended Complaint states that "certain web content systems and services [that are] part of [Cloudflare's] content delivery network" infringe dependent claims 8 and 24 of the '335 patent. ECF No. 13 ¶ 13.

As explained by Fastly (No. 17-284, Doc. 27 at 3-5, "Fastly Br.") the '335 patent claims the idea of modifying in-transit communications based on third-party data, as shown by claim 8 (which depends on claim 1):

> 1. A method for providing an internet third party data channel, said third party data channel being established within an existing data channel between an internet

server and an internet client, said third party data channel connecting a data source distinct from said internet server to said internet client, said method including the steps of:

a) using a processing device distinct from said internet server for monitoring said existing data channel for a data communication having a predetermined property, said data communication having an intended recipient of one of said internet server and said internet client,

b) upon detection of said data communication, performing:

b1) the step of accessing said data source to obtain third party data,

b2) a step selected from the group consisting of the step of modifying said data communication in response to said third party data and the step of replacing said data communication in response to said third party data to obtain a resultant data communication, and

b3) the step of sending said resultant data communication to said intended recipient.

8. The method of claim 1, wherein data is only transmitted on said third party data channel when the data transmission rate of said server to said client is below a predetermined threshold.

'335 Patent (attached to Am. Compl., Doc. 13, Ex. A) at cls. 1, 8. The specification demonstrates that the idea is not limited to particular hardware—the patentee intended that the claimed product be used in a generic internet browser or general-purpose computer. *See id.* at 4:16-24 ("[T]he computer program product of the present invention . . . . may be an internet browser or any kind of extension module for such a browser. The product may be stored on a computer readable data carrier (e.g., a floppy disk or a CD-ROM) or loaded into a computer for execution.").

IV. LEGAL BACKGROUND

Section 101 limits patentable subject matter to "new and useful" processes, machines, and improvements. For over 150 years, the Supreme Court has consistently excluded "laws of nature, physical phenomena, and abstract ideas" from the scope of § 101. *See Bilski v. Kappos*, 561 U.S. 593, 601-602 (2010) (citing *Le Roy v. Tatham*, 14 How. 156, 174-75 (1853)). For example, § 101 does not allow patents to claim "the heat of the sun, electricity, or the qualities of metals." *See*

Funk Bros. Seed Co. v. Kalo Inoculant Co., 333 U.S. 127, 130 (1948) (finding invalid, under §
101, claims directed to a culture of bacteria that fixes nitrogen in plants). In contrast, "a novel and
useful structure created with the aid of knowledge of scientific truth" may satisfy § 101. *Mackay
Radio & Telegraph Co. v. Radio of Am.*, 306 U.S. 86, 94 (1939); *Diamond v. Diehr*, 450 U.S. 175,
187 (1981) (process to cure rubber using mathematical equation found patentable).

 The Supreme Court has examined software patents under the rubric of § 101 for over for-
ty years. In *Gottschalk v. Benson*, for example, the Court found that a claim directed to "the pro-
grammed conversion of numerical information in general-purpose digital computers" did not sat-
isfy § 101. 409 U.S. 63, 71 (1972) ("It is conceded that one may not patent an idea. But in practical
effect that would be the result if the formula for converting BCD numerals to pure binary numerals
were patented in this case."). More recently, in *Alice*, the Court found that claims "designed to
facilitate the exchange of financial obligations between two parties by using a computer system as
a third-party intermediary" did not survive § 101. 134 S. Ct. at 2352, 2358-59 (noting that, if use
of computers necessarily satisfied § 101, "the determination of patent eligibility [would] depend
simply on the draftsman's art, thereby eviscerating the rule that laws of nature, natural phenomena,
and abstract ideas are not patentable").

 The Federal Circuit regularly considers § 101 arguments in the software context. Even
though *Alice* issued around three years ago, the Federal Circuit has cited to it in over 60 opinions—
around 30 of those opinions were issued within the last twelve months or so, most invalidating the
claims at issue. The Court should look to this robust line of cases to find the instant claims invalid.
See Affinity Labs of Tex., LLC v. DIRECTV, LLC, 838 F.3d 1253, 1258 (Fed. Cir. 2016).

 If a patent does not satisfy § 101, courts invalidate the claims. *See Bascom Global Internet
Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1347 (Fed. Cir. 2016). Because courts decide

patent eligibility under § 101 as a matter of law, the Court should not apply a heightened, clear-and-convincing standard. *See Nautilus Inc. v. Biosig Instrs., Inc.*, 134 S. Ct. 2120, 2130 n.10 (2014) (presumption of validity does not affect legal determination of definiteness).

For the reasons in Fastly's brief, the Court should (i) review Cloudflare's § 101 challenge on the pleadings, Fastly Br. at 1-2; (ii) apply *Alice*'s two-part test, *id.* at 2; and (iii) find that the claims rise and fall together, *id.* at 2-3.

V.   ARGUMENT

A. *Alice* Step One: The '335 Patent Is Directed to an Abstract Idea

As stated in Fastly's brief, the Court should find that:

- The '335 patent is directed to the abstract idea of modifying in-transit communications based on third-party data, Fastly Br. at 3-5;

- The '335 patent automates real-world processes, *id.* at 5-6;

- The Court should look to *Intellectual Ventures v. Symantec Corp.*, 838 F.3d 1307 (Fed. Cir. 2016) as having the claims most analogous to the ones at issue, *id.* at 6-9.

Cloudflare further expands on these arguments below.

Claims 8 and 24 Address an Abstract Idea. Fastly's motion properly focuses on claim 1 as an exemplary claim. Claims 8 and 24 address the same abstract idea. Dependent claim 8 incorporates independent claim 1, adding a single claim limitation: "wherein data is only transmitted on said third party data channel when the data transmission rate of said server to said client is below a predetermined threshold." The addition does not alter the fundamental nature of the claim—modifying in-transit communications between a server and a client. *See Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1338 (Fed. Cir. 2017) (requiring courts to determine if the claim's "character as a whole" is directed to excluded subject matter).

Claim 24 (which depends on independent claim 18) is the apparatus-claim version of claim 8. Independent claim 1 claims "a method for providing an internet third party data channel," while independent claim 18 claims "an apparatus for providing an internet third party data channel." Besides this preamble, both claims 1 and 18 claim the same elements in the same order. Claim 24 adds the same claim limitation as Claim 8. For the same reasons as listed above, the limitation in dependent claim 24 does not transform the claim into something patentable.

Numerous Federal Circuit Opinions Support *Intellectual Ventures*. Cloudflare agrees with Fastly that *Intellectual Ventures v. Symantec* is a particularly relevant and persuasive example of the Federal Circuit finding similar technology as an unpatentable abstract idea. Fastly Br. at 6-9. *Intellectual Ventures* is consistent with many other decisions[1] finding similar technology un-patentable, including three from this year alone:

- In *EasyWeb Innovations, LLC v. Twitter, Inc.*, the Federal Circuit found, as abstract, a patent claiming a message-publishing system acting as a data middleman that "accepts messages in multiple ways, such as by fax, telephone, or email, verifies the message was sent by an authorized sender, and converts and publishes the message on the Internet." --- F. App'x ---, No. 2016-2066, 2017 WL 1969492, at *1-2 (Fed. Cir. May 12, 2017) (characterizing the asserted claims as "reciting the familiar concepts of receiving, authenticating, and publishing data").

- In *Smartflash LLC v. Apple Inc.*, the Federal Circuit found, as abstract, a patent claiming a terminal acting as a data middleman between a data supplier, a data carrier, and a payment validation system. 680 F. App'x 977, 978-79, 984 (Fed. Cir. Mar. 1, 2017) (characterizing the asserted claims as "reading, receiving, and responding to payment validation data and, based upon the amount of payment, and access rules, allowing access to multimedia content").

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[1] While Cloudflare identifies recent data-middleman decisions here, many other recent Federal Circuit decisions confirm those decisions' reasoning. *See*, *e.g.*, *Intellectual Ventures v. Erie Indemnity Co.*, 850 F.3d 1315, 1327 (Fed. Cir. 2017) (classifying, as abstract, claims that "collect, classify, or otherwise filter data"); *TDE Petro. Data Sol'ns, Inc. v. AKM Enter., Inc.*, 657 F. App'x 991, 993 (Fed. Cir. 2016) ("[C]laim 1 is the sort of data gathering and processing claim that is directed to an abstract idea under step one of the *Alice* analysis."); *Credit Acceptance*, 859 F.3d at 1056 ("[T]he output of data analysis can be abstract.").

- In *Clarilogic, Inc. v. FormFree Holdings Corp.*, the Federal Circuit found, as abstract, a patent claiming a computer acting as a data middleman by (i) receiving a request for "certified financial data," (ii) collecting, transforming, and validating financial data from third-party financial sources, and (iii) generating a report based on the received data. 681 F. App'x 950, 951-52 (Fed. Cir. Mar. 15, 2017) ("When the focus of the asserted claims is on collecting information, analyzing it, and displaying certain results of the collection and analysis, the claims are directed to an abstract idea.").

The claims here are abstract for the same reasons as in the cases above. Each claim focuses on a "processing device" that acts as a data middleman by modifying in-transit communications between a client and a server. For the same reasons as *Intellectual Ventures*, *Smartflash*, *EasyWeb*, and *Clarilogic*, the claims are directed to an abstract idea. *See also* Fastly Br. at 9-10 (addressing similar cases).

Here, Computers Are Invoked Only as a Tool. Cloudflare expects Blackbird to point to decisions where a claimed "improvement to a specific computer technology" satisfied *Alice* step one. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335-36 (Fed. Cir. 2016); *McRo, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016). But, even after those decisions, the vast majority of software-patent claims fail *Alice* because the claims invoke computers as a tool. In fact, the Federal Circuit has issued twenty opinions finding software claims unpatentable while citing *McRo* or *Enfish*.[2] Simply put, *Enfish* and *McRo* do not exempt software patents from § 101.

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[2] *See FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1094 (Fed. Cir. 2016); *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1149 (Fed. Cir. 2016); *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017); *Apple Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1241 (Fed. Cir. 2016); *Credit Acceptance*, 859 F.3d at 1055; *EasyWeb*, 2017 WL 1969492 at *2; *Clarilogic*, 2017 WL 992528, at *2; *Affinity Labs*, 838 F.3d at 1262; *Intellectual Ventures*, 838 F.3d at 1315; *Tranxition, Inc. v. Lenovo (U.S.) Inc.*, 664 F. App'x 968, 971-72 (Fed. Cir. 2016); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016); *LendingTree, LLC v. Zillow, Inc.*, 656 F. App'x 991, 996 (Fed. Cir. 2016); *Evolutionary Intelligence LLC v. Sprint Nextel Corp.*, 677 F. App'x 679, 680 (Fed. Cir. 2017); *Intellectual Ventures I LLC v. Erie Indemnity Co.*, 850 F.3d 1315, 1327-28 (Fed. Cir. 2017); *Smartflash*, 680 F. App'x at 982-83; *W. View

Credit Acceptance shows a typical post-*Enfish* analysis. There, the patent claimed a "system for generating financing packages," comprising a database, a user terminal, and a server that communicate with each other in particular ways. *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1047 (Fed. Cir. 2017). The Federal Circuit found the claims abstract. The Court noted that, even after *Enfish* and *McRo*, *Alice* asks whether the "focus" of the claims is on a "specific asserted improvement in computer capabilities" or an "abstract idea for which computers are invoked merely as a tool." *Id.* at 1055. While the patentee argued that the claims "improve[d] the functionality of the general purpose computer by programming fundamentally new features," the Federal Circuit found otherwise—the Court held that the computer automated the abstract idea of gathering and analyzing data. *Id.* at 1054-56. Similar reasoning doomed the data-centric patents in *Smartflash*, *EasyWeb*, and *Clairilogic*:

- "Claim 1 merely recites the familiar concepts of receiving, authenticating, and publishing data. . . . Claim 1, unlike the claims found non-abstract in other cases, uses generic computer technology to perform data collection, analysis, and publication and does not recite an improvement to a particular computer technology." *Easy-Web*, 2017 WL 1969492 at *2.

- "The asserted claims here invoke computers merely as tools to execute fundamental economic practices. . . . The district court correctly concluded that the asserted claims recite methods and systems for controlling access to content data, such as various types of multimedia files, and receiving and validating payment data." *Smartflash*, 680 F. App'x at 982.

- "Claim 1 recites a method for providing certified financial data about an individual, comprising the steps of receiving a request, electronically collecting financial data,

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Research, LLC v. Audi AG, 2017 WL 1399699, at *3 (Fed. Cir. Apr. 19, 2017); *Shortridge v. Foundation Construction Payroll Serv., LLC*, 655 F. App'x 848, 853-54 (Fed. Cir. 2016); *In re TLI Communic'ns LLC Patent Litig.*, 823 F.3d 607, 612-13 (Fed. Cir. 2016); *Audatex N. Am. Inc. v. Mitchell Int'l, Inc.*, No. 2016-1913, 2017 WL 3188451, at *4 (Fed. Cir. July 27, 2017); *Return Mail, Inc. v. U.S. Postal Serv.*, No. 2016-1502, --- F.3d ---, 2017 WL 3687450, at *13 (Fed. Cir. Aug. 28, 2017); *but see Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288 (Fed. Cir. 2016) (finding software claim satisfied § 101); *Trading Techs. Int'l Inc. v. CQG, Inc.*, 675 F. App'x 1001 (Fed. Cir. 2017) (same); *Bascom*, 827 F.3d at 1352 (same).

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transforming the data into a desired format, validating the data by applying an al-
gorithm engine, analyzing certain exceptions, and generating a report. . . . [A]
method for collection, analysis, and generation of information reports, where the
claims are not limited to how the collected information is analyzed or reformed, is
the height of abstraction." *Clarilogic*, 681 F. App'x at 954.

Here, Blackbird's patent focuses on modifying in-transit communications by (i) monitoring a data

channel, (ii) detecting particular data in a communication, (iii) accessing third-party data, (iv)

modifying or replacing the communication, and (v) sending the data to a recipient. As in *EasyWeb*,

Smartflash, and *Clarilogic*, the claims require that a computer receive, analyze, and transform

data—standard processes that are hallmarks of claims that invoke computers as a tool. The claims

thus fail *Alice* step one.

B. *Alice* Step Two: No Transformative Element Saves the Claims

As stated in Fastly's brief, the Court should find that:

- The claims recite conventional computer elements, not an inventive concept, Fastly
Br. at 11-12;

- The "ordered combination" of the claims do not confer patent eligibility, *id.* at 12-
16; and

- The other claims do not impact the eligibility analysis or change the result, *id.* at
16-17.

Cloudflare further expands on these arguments below.

Claims 8 and 24 Recite Generic, Conventional Computer Elements and Functions.

The Federal Circuit has repeatedly confirmed that generic, conventional computer elements and

functions do not save a claim from invalidation under § 101. *See*, *e.g.*, *Credit Acceptance*, 859

F.3d at 1056 (recognizing that "databases," "user terminals," "servers," "interfaces," and "net-

works" are general, conventional computer components); *TDE Petro. Data*, 657 F. App'x at 993

(finding that "ordinary" data-analysis processes did not transform the claim into something patent-

able, including "storing state values, receiving sensor data, validating sensor data, or determining

a state based on sensor data"). Claim 1 invokes generic, conventional computer processes and steps to modify in-transit communications between a client and server, as noted by Fastly. Fastly Br. at 11-12. The same analysis applies to independent claim 18, which includes the same limitations, in apparatus format.

The additional limitation found in dependent claims 8 and 24 (which conditions activity on a data-transmission rate between the server and the client) does not change the analysis. First, the Federal Circuit requires that the Court consider the "focus" of the claim. *Credit Acceptance*, 859 F.3d at 1055. All of the claims focus on modifying in-transit communications, and thus fail *Alice* together. Further, an added feature executed by conventional computer components, without more, does not impart patentability. For example, in *Shortridge*, the patentee argued that a claim limitation requiring "simultaneous" data analysis satisfied *Alice* step two. But the claim limitation was satisfied by the same conventional computer components used by the rest of the claim—"the '933 patent claims generating CPRs in conjunction with and simultaneous with core payroll processing *simply by applying computer elements* such as relational databases." 655 F. App'x at 853 (emphasis added). Here, as in *Shortridge*, a conventional computer component (a "processing device") performs the limitation in claim 8: the processing device does not impart patentability. *See id.*

Similarly, in *Erie Indemnity*, the patentee argued that a claim limitation requiring the use of an index with specific XML tags and metadata satisfied *Alice* step two. 850 F.3d at 1328. But the Federal Circuit found that, while the use of a "well-known tag . . . certainly narrows the scope of the claims, in this instance, it is simply akin to limiting an abstract idea to one field of use or adding token post-solution components." *Id.* Here, instead of requiring a specific type of "tag," claim 8 states that the server should not send more data down a line if the line is already in use— a concept that is a "natural consequence of carrying out the abstract idea [here, modifying in-transit

communications] in a computing environment." *Id.* at 1329.[3] Claim 8 still fails to show a "non-

conventional and non-generic arrangement of known, conventional pieces." *Id.* Claim 24, consist-

ing of the same limitation, fails *Alice* step 2 for the same reasons.

The Claims Use Generic Technical Components. Cloudflare agrees with Fastly that the

facts that supported validity in *Bascom* are absent here. Fastly Br. at 13-16. The *Bascom* claims

contained a specific improvement that required "the installation of a filtering tool at a specific

location, remote from end-users, with customizable filtering features specific to each end user,"

which was a "technology-based solution (not an abstract-idea-based solution implemented with

generic technical components in a conventional way)." 827 F.3d at 1350-51. Here, the specifica-

tion shows that the patent is not limited to a particular location and does not require customizable

filtering features specific to each end user. Instead, the patent identifies a number of generic,

known technical components by which to implement the broad-based solution. *See* '335 Patent at

4:16-24 (identifying an internet browser, floppy disk, CD-ROM, or computer). In this light, the

claims do not satisfy § 101. *See Clarilogic*, 681 F. App'x at 955 (finding claims unpatentable when

they require "only off-the-shelf, conventional computer technology"); *Affinity Labs*, 838 F.3d at

1265 (distinguishing *Bascom* when the additional claim limitations "describe purely conventional

features of cellular telephones and the applications that enable them to perform particular func-

tions").

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[3] Of course, there are myriad real-world examples of the limitation in claims 8 and 24 (conditioning transmission on finding available space for the transmission). For example, (i) telephone calls are rejected during a radio call-in contest when the lines are full; (ii) the postal service will stop delivering letters to a post-office box if it fills up with mail; and (iii) a commuter may decide to avoid a major highway if a traffic helicopter reports heavy traffic or if the commuter sees a backup of vehicles.

VI. CONCLUSION

For these reasons and those stated in Fastly's brief, the Court should invalidate Blackbird's

patent and dismiss the lawsuit with prejudice.

Respectfully submitted,

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